



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 1

1 CONGRESS STREET, SUITE 1100
BOSTON, MASSACHUSETTS 02114-2023

**CERTIFIED MAIL –
RETURN RECEIPT REQUESTED**

December 5, 2007

David Lilley, President and Chief Executive Officer
Cytec Industries Inc.
Five Garret Mountain Plaza
West Paterson, NJ 07424

Re: Administrative Order and Clean Air Act Reporting Requirement
EPA Docket No. AAA-08-0008

Dear Mr. Lilley:

The U.S. Environmental Protection Agency ("EPA") is issuing this Administrative Order ("AO") and Reporting Requirement ("RR") to Cytec Industries Inc. ("Cytec") under the authority of Sections 113 and 114 of the Clean Air Act ("CAA"), 42 U.S.C. § 7413(a) and 42 U.S.C. § 7414(a). The AO and the RR follow an inspection conducted jointly by EPA and the Connecticut Department of Environmental Protection ("CT DEP") on June 12, 2007 at Cytec's facility located in Wallingford, Connecticut.

The AO contains EPA's findings that Cytec has violated the National Emission Standards for Hazardous Air Pollutant Emissions: Manufacture of Amino/Phenolic Resins, found at 40 C.F.R. Part 63, Subpart OOO ("Amino/Phenolic Resins NESHAP"), and the facility's Title V Operating Permit. The violations are of various requirements relating to open-ended valves or lines, leak detection practices, and the monitoring and performance of condensers. The AO requires Cytec to comply fully with the Amino/Phenolic Resins NESHAP and its Title V Operating Permit.

The RR orders Cytec to submit monitoring reports, documentation regarding leak detection practices, and recordkeeping relating to open-ended lines, organic liquid storage tanks, closed vent control systems, and condensers and associated temperature monitoring systems.

Cytec Industries Inc.

Page 2 of 2

If Cytec would like to schedule a conference to discuss this matter with EPA, please contact Abdi T. Mohamoud at (617) 918-1858, or have your legal counsel contact EPA attorney John W. Kilborn at (617) 918-1893 within seven days of the date of issuance of this AO and RR.

Sincerely,

Susan Studlien

Susan Studlien, Director
Office of Environmental Stewardship

Enclosure

cc: Bob Girard, CT DEP
Dennis Demchak, CT DEP
Bill Whibey, CT DEP
Charles J. Cappannari, Cytec, Environmental Manager (Wallingford)
Robert M. Tyler, P.E., Cytec (Wallingford) (via email)
Karen E. Koster, VP, Cytec, Safety, Health and Environment (NJ)

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I – NEW ENGLAND**

IN THE MATTER OF

Cytec Industries Inc.
South Cherry Street
Wallingford, CT 06492

Proceeding under Sections 113 and 114 of the Clean Air Act

Docket No. AAA-08-0008

ADMINISTRATIVE ORDER AND REPORTING REQUIREMENT

INTRODUCTION

1. The United States Environmental Protection Agency, Region I (“EPA”) issues this Administrative Order (“AO”) and Reporting Requirement (“RR”) to Cytec Industries Inc., regarding its facility located at South Cherry Street, Wallingford, Connecticut (“Cytec” or the “Facility”), under the authority of Sections 113(a)(3) and 114(a)(1) of the Clean Air Act (the “Act”), 42 U.S.C. §§ 7413(a)(3) and 7414(a)(1).
2. The AO describes EPA’s findings that Cytec violated the National Emission Standards for Hazardous Air Pollutant Emissions: Manufacture of Amino/Phenolic Resins (“Amino/Phenolic Resins NESHAP”), found at 40 Code of Federal Regulations (“C.F.R.”) Part 63, Subpart OOO, and the conditions of its Title V Operating Permit (Permit no. 189-0136-TV) issued by Connecticut Department of Environmental Protection (“CT DEP”) on January 4, 2005 (the “Operating Permit”).
3. This AO requires Cytec to comply as expeditiously as practicable with the requirements of the Amino/Phenolic Resins NESHAP and the Operating Permit.

4. Section 114(a)(1) of the Clean Air Act, 42 U.S.C. §7414(a)(1), gives EPA the authority to require Cytec to provide information so that EPA can determine Cytec's compliance with the Act and its implementing regulations.

5. This RR requires Cytec to submit information to EPA about its facility and operations at its South Cherry Street location.

LEGAL AND FACTUAL BASIS

6. Cytec manufactures resins at the Facility and is a major source of hazardous air pollutants ("HAPs"), subjecting Cytec to the requirements of the Amino/Phenolic Resins NESHAP.

7. Cytec is a major stationary source of volatile organic compounds ("VOCs") and, therefore, is subject to the Operating Permit.

8. On June 12, 2007, EPA and CT DEP conducted a joint inspection of the Facility.

9. Section III.I.3.a.vii of the Operating Permit and 40 C.F.R. §63.1028(c)(3) require Cytec to perform visual inspections around the agitator seals for Kettles 63 and 64.

10. Section III.I.3.b.iv of the Operating Permit and 40 C.F.R. §63.1028(c)(3)(i) require Cytec to document the date of each agitator seal inspection.

11. Section III.I.3.c.iii.C of the Operating Permit and 40 C.F.R. §63.1039(b) require Cytec to document in the semi-annual report the number of agitator seal leaks detected as well as the number of agitator seal leaks not repaired as required by 40 C.F.R. §63.1024, or any delay of repair pursuant to 40 C.F.R. §63.1024(d).

12. Pursuant to 40 C.F.R. §63.1028(c), each agitator seal shall be monitored to detect leaks. The safety guard surrounding the agitator seals on Kettle 63 and Kettle 64 does not create an obstruction that prevents access to the agitator seals by a monitoring probe.

13. Section III.I.3 of the Operating Permit and 40 C.F.R. §63.1033(b) require Cytec to equip each open-ended line with a cap, blind flange, plug, or second valve. Further, Section III.I.3.a.x and 40 C.F.R. §63.1033(b) require that each cap, blind flange, plug, or second valve seal the open-end at all times, except during operations requiring process flow or during maintenance.

14. Section III.I.3.b.vi of the Operating Permit and 40 C.F.R. §63.1038 require Cytec to maintain a list of open-ended valves or lines along with identification of the capping method employed.

15. Section III.I.2 of the Operating Permit and 40 C.F.R. §63.1406(a)(2) require Cytec to reduce total HAP emissions by at least 83%, or limit the total HAP emissions to less than 0.0000057 pounds per pound of product for non-solvent based products or 0.0000567 pounds per pound of product for solvent based products for each batch produced.

16. Section III.I.2 of the Operating Permit and 40 C.F.R. §63.1413(a)(4)(i)(C)(2) require Cytec to operate the kettle condensers to meet the HAP control requirement.

17. Section III.I.2.a.i of the Operating Permit and 40 C.F.R. §63.1415(a)(2), for Kettles 63 and 64, require Cytec to monitor condenser exit temperatures and verify proper operation of the condensers each day of use.

18. Section III.I.2.b.i and 40 C.F.R. §63.1415(a)(2) require Cytec to record condenser exit temperatures at Kettles 63 and 64 during kettle use once per day.

19. The Operating Permit does not specify the required operating range of the condenser temperatures for Kettles 63 and 64.

20. Pursuant to Section 504(a) of the Act, each permit issued under Title V of the Act must contain conditions necessary to assure compliance with the applicable requirements of Title V, including the requirements of the applicable implementation plan.

FINDINGS

21. Based upon all of the foregoing, EPA finds that Cytec failed to perform visual inspections around the agitator seals of Kettles 63 and 64, at various times since January 20, 2003. Accordingly, Cytec violated Section III.I.3.a.vii of the Operating Permit and 40 C.F.R. §63.1028(c)(3).
22. At various times since January 20, 2003, Cytec failed to document the date of each agitator seal inspection. Accordingly, Cytec violated Section III.I.3.b.iv of the Operating Permit and 40 C.F.R. §63.1028(c)(3)(i).
23. At various times since January 20, 2003, Cytec failed to document in the semi-annual report the number of agitator leaks detected. Accordingly, Cytec violated Section III.I.3.c.iii.C of the Operating Permit and 40 C.F.R. §63.1039(b).
24. At various times since January 20, 2003, Cytec failed to document the number of agitator seal leaks not repaired. Accordingly, Cytec violated 40 C.F.R. §63.1024, and the provisions regarding recording any delay of repair pursuant to 40 C.F.R. §63.1024(d).
25. The safety guard on Kettles 63 and 64 does not qualify for the exemption from monitoring contained in 40 C.F.R. §63.1028(e)(6).
26. At various times since January 20, 2003, Cytec failed to equip each open-ended line with a cap, blind flange, plug, or second valve. Accordingly, Cytec violated Section III.I.3 of the Operating Permit and 40 C.F.R. §63.1033(b).
27. At various times since January 20, 2003, Cytec failed to keep each cap, blind flange, plug, or second valve sealed at all times, except during operations requiring process flow or during maintenance. Accordingly, Cytec violated Section III.I.3.a.x and 40 C.F.R. §63.1033(b).

28. At various times since January 20, 2003, Cytec failed to maintain a list of open-ended valves or lines along with identification of the capping method employed. Accordingly, Cytec violated by Section III.I.3.b.vi of the Operating Permit and 40 C.F.R. §63.1038.
29. At various times during the period of July 19, 2005 and November 16, 2005, and on November 9, 2006, Cytec failed to reduce total HAP emissions by at least 83%, or limit the total HAP emissions to less than 0.0000057 pounds per pound of product for non-solvent based products or 0.0000567 pounds per pound of product for solvent based products for each batch produced. Accordingly, Cytec violated Section III.I.2 of the Operating Permit and 40 C.F.R. §63.1406(a)(2).
30. At various times during the period of July 19, 2005 and November 16, 2005, and on November 9, 2006, Cytec failed to operate the kettle condensers to meet the HAP control requirement. Accordingly, Cytec violated Section III.I.2 of the Operating Permit and 40 C.F.R. §63.1413(a)(4)(i)(C)(2).
31. At various times during the period between April 22, 2006 and June 20, 2006, for Kettles 63 and 64, Cytec failed to monitor condenser exit temperatures and verify proper operation of the condensers each day of use. Accordingly, Cytec violated Section III.I.2.a.i of the Operating Permit and 40 C.F.R §63.1415(a)(2).
32. At various times during the period April 22, 2006 and June 20, 2006, Cytec failed to record condenser exit temperatures at Kettles 63 and 64 during kettle use once per day. Accordingly, Cytec violated Section III.I.2.b.i and 40 C.F.R §63.1415(a)(2).
33. The failure of the Operating Permit to specify the operating temperatures of the condensers for Kettles 63 and 64 violates Section 504(a) of the Act.

ADMINISTRATIVE ORDER

34. Pursuant to Section 113(a)(3) of the Act, EPA hereby orders Cytec to comply with all applicable requirements of the Amino/Phenolic Resins NESHAP and the Operating Permit as expeditiously as practicable.
35. Within twenty (20) days of the effective date of this AO, for Kettles 63 and 64 Cytec shall monitor the agitator seals for leaks as required by the Amino/Phenolic Resins NESHAP and 40 C.F.R. Part 63, Subpart UU.
36. Within sixty (60) days of the effective date of this AO, Cytec shall apply for an amendment of its Operating Permit to delete Section III.I.3.a.(viii) and to add a provision stating that Cytec shall monitor Kettles 63 and 64 as required by the Amino/Phenolic Resins NESHAP and 40 C.F.R. Part 63, Subpart UU.
37. Within sixty (60) days of the effective date of this AO, Cytec shall apply for an amendment of its Operating Permit to specify the range of condenser exit temperatures for Kettles 63 and 64.

REPORTING REQUIREMENT

38. Pursuant to Section 114(a)(1) of the Act, Cytec shall submit the following information to EPA and CT DEP within 30 days after the effective date of this AO and this RR. For items a. through f. and items j. through n., if there are no records or documents that respond to an item, Cytec shall state that there are no records or documents that respond to such item and explain why there are no records or documents responding to that item.
- a. copies of all Title V semi-annual monitoring reports for the period from January 1, 2003 to the date of Cytec's response to this RR (the "Response Date");
 - b. for emission unit EU-R14-3 (Kettle 63) and emission unit EU-R14-4 (Kettle 64) documentation of weekly inspections of the agitator seals during the period from January 1, 2003 to the Response Date;

- c. for Kettles 63 and 64, documentation of condenser exit temperatures during the period from January 1, 2003 to the Response Date. Please provide a printed hard copy of the data and an electronic file in a spreadsheet format;
- d. for Kettles 63 and 64, documentation of daily verification of the proper operation of the condensers during the period from January 1, 2003 to the Response Date;
- e. for emission units, EU-R14-1 through R14-10 (see Table II.A.1 of the Operating Permit), documentation of Cytec's response to all leaks found at pump seals, connectors, agitator seals, pressure relief devices, sampling connection systems, open-ended lines or valves, and closed vent systems, during the period from January 1, 2003 to the Response Date. Include the dates and descriptions of the initial and final repairs of each leak, as well as the maximum instrument reading at the time the leak was repaired or determined to be non-repairable;
- f. documentation of the number of hours that the Kettle 63 and 64 recirculation pumps were in HAP service during the period from January 1, 2003 to the Response Date;
- g. a list of all liquid storage vessels, with capacity greater than or equal to 40 cubic meters (m^3) that Cytec uses to store volatile organic liquids. List only if the dates of construction, reconstruction, or modification commenced after July 23, 1984;
- h. a description of the type and size (volume) of each storage vessel referenced in item g. above;
- i. a description of the kind of material stored in each storage vessel referenced above in item g., including the vapor pressure of each material and whether the material is a VOC or HAP;
- j. a description of the control technology Cytec employs to reduce HAP and/or VOC emissions from the vessels referenced in g. above; and records of Cytec's initial and annual inspections of each storage vessel and closed vent system including the method used, during the period from January 1, 2003 to the Response Date;
- k. for emission units EU-C01-4, EU-C01-5, EU-C01-6, and EU-R01-19, EU-R01-20, EU-R01-24, and EU-R01-58, a copy of the operating plan submitted in accordance with 40 C.F.R. §60.114b(c)(1), regarding the operation of the closed vent system and control device, as well as the monitoring of the parameters of the closed vent system and the control device used for the closed vent system;
- l. a copy of the performance test of the condensers for Kettles 63 and 64 that was supposed to be performed no later than 150 days after the compliance date, together with all the operating parameters recorded during the test;

- m. a copy of Cytec's initial compliance report that was due on January 20, 2003; and
- n. a report regarding the monitoring of the agitator seals for Kettles 63 and 64 conducted pursuant to Paragraph 35 of this AO. Such report shall include, without limitation, the date, method, and results of such monitoring.

39. Submit the information required above to the following address:

Susan Studlien, Director
Office of Environmental Stewardship
U.S. Environmental Protection Agency – Region I
1 Congress Street
Suite 1100 (SEA)
Boston, MA 02114-2023
ATTN: Abdi T. Mohamoud, Environmental Engineer

AND

Robert Girard, Assistant Director
Air Compliance and Field Operation
CT Department of Environmental Protection
79 Elm Street
Hartford, CT 06106-5127

40. Please be advised that failure to provide information required by this RR may result in a civil or administrative enforcement action by EPA under Section 113 of the Act, 42 U.S.C.

§7413, ordering the submission of the required information, seeking monetary penalties, or both.

Cytec should also be aware that federal law provides for criminal penalties for anyone who knowingly makes any false statement, representation, or certification in a report required by EPA.

41. Cytec may, if desired, assert a business confidentiality claim covering part or all of the information in the manner set forth in 40 C.F.R. § 2.203(b). EPA will disclose information covered by such a claim only to the extent, and according to the procedures, set forth in 40 C.F.R. Part 2, Subpart B. If no such claim accompanies the information when EPA receives it, EPA may make it available to the public without further notice to Cytec. Please be aware that

the State of Connecticut may have different rules and regulations governing the protection of confidential business information. Cytec should read the regulations cited above carefully before asserting a business confidentiality claim, since certain categories of information are not properly subject to such a claim.

ENFORCEMENT

42. At any time following the issuance of this AO and this RR, EPA may take any or all of the following actions: issue a further order requiring compliance with 40 C.F.R. Parts 63 and 70, and other provisions of the Act; issue an administrative penalty order; and/or bring a civil action in federal district court for an injunction and/or monetary penalties up to \$32,500 per day for each violation. See Sections 113(a), (b) and (d) of the Act, 42 U.S.C. Sections 7413(a), (b) and (d), and 40 C.F.R. Part 19 (Clean Air Act judicial and administrative penalties raised from \$25,000 to \$32,500 effective March 16, 2004). Be advised that Section 113(e)(2) of the Act, 42 U.S.C. § 7413(e)(2), contains provisions that affect the burden of proof with respect to violations which continue or recur on or after the date of issuance of this AO and this RR.

43. If Cytec has knowingly violated its Operating Permit and/or the federal requirements found at 40 C.F.R. Part 63, Cytec and its responsible corporate officers may be subject to criminal penalties under Title 18 of the United States Code, imprisonment for not more than five years, or both. See Section 113(c) of the Act, 42 U.S.C. Section 7413(c). Be advised that issuance of this AO and this RR does not preclude EPA from electing to pursue any other remedies or sanctions authorized by law which are available to address these violations.

OPPORTUNITY TO CONFER

44. Cytec may confer with EPA concerning this AO and this RR and the findings upon which it is based. To schedule a conference, please contact Senior Enforcement Counsel John Kilborn at (617) 918-1893, within seven (7) days of the date of issuance of this AO and this RR. Cytec may choose to be represented by counsel at the conference.

EFFECTIVE DATE AND APPLICABILITY

45. This AO and this RR shall become effective on the fourteenth day after the date of issuance specified below. The provisions of this AO and this RR apply to Cytec, its officers, agents, servants, contractors, employees, successors, and assigns, and to all persons, firms, and corporations acting under, through, or for Cytec. This AO and this RR are not subject to Office of Management and Budget review under the Paperwork Reduction Act, 44 U.S.C. Chapter 35. If Cytec has any questions regarding this AO and this RR, please contact Senior Enforcement Counsel, John Kilborn at (617) 918-1893 or Environmental Engineer, Abdi T. Mohamoud at (617) 918-1858.

Susan Studlien
Susan Studlien, Director
Office of Environmental Stewardship
U.S. EPA, Region I

11/29/07
Date of Issuance